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Progman

Subject	Page

Progman

Model: All

Production: All

OBJECTIVES

After completion of this module you will be able to:

- Explain what Progman is

- Identify the advantages of Progman

- Check Setting and Configuration Information

- Verify that Interfaces are at latest firmware levels

- Start a Programming or Coding Session with Progman

Progman Introduction

With the release of CIP 15.0, BMW released a new software program known as Progman.
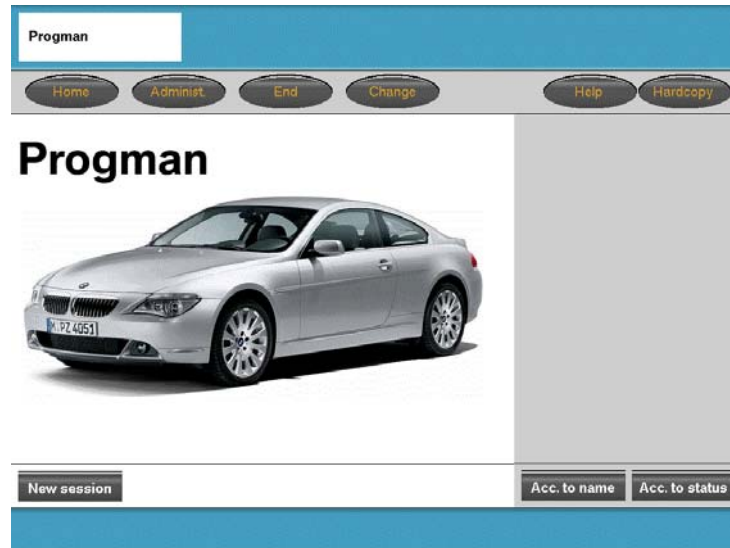
Progman is a software package that operates with Windows XP Embedded to manage:

- Administration & assignment of OPPS/OPS/Diagnostic heads plus network configuration/addressing.

- Installation/loading of new data updates via Jetstream.

- Activation of a Coding, Individualization or Programming request from a GT1 to an SSS via a multiconsole/multisession feature.

- Coding, Individualization or Programming of older vehicles via the SGC/UNIX application.

- Coding, Individualization & Programming functions of CIP.
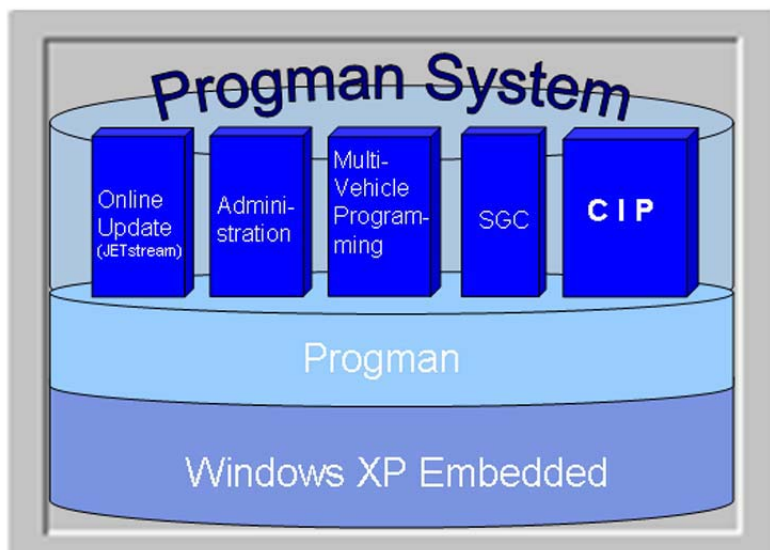
Progman

The new programming management tool utilizes a new operating system (Windows XP Embedded) to manage the programming processes that can be initiated via the SSS.

Progman utilizes Windows XP Embedded which will serve as the basis for all further programs required for programming applications. No changes can be made to the operating system of this Windows variant and it can be used only in connection with the corresponding hardware (Software Service Station).

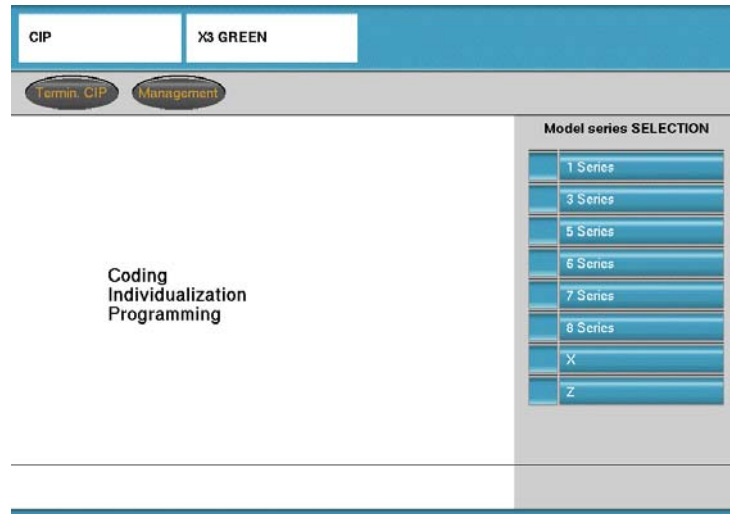Progman incorporates all Coding, Individualization & Programming functions that were previously part of the DIS CD for E31/32/34/36/38/39/46/52 & E53, which operates under the old SGC/UNIX application, into the CIP application.

Since CIP is incorporated into Progman, it will now contain all Coding, Individualization & Programming functions. CIP will be used to launch the SGC/UNIX application for the older vehicles as well as launch the Windows XP based application for Coding and Programming the newer vehicles.

In the future the E36/38/39/46/52/53 applications will be converted/integrated directly into CIP and be based on Windows XP Embedded. The structure for the E31/32/34 will not be changed and will remain SGC/UNIX based.

Administration

The administration tool provides the same setting options as before however, Progman adds additional features/capabilities:

- Ability to view and select accessible "Interfaces" (Diagnostic Head, OPPS, OPS...)
- Configure interfaces
- Adjust SSS and network specific settings
- View available SSS units and select a specific unit
- Select language specific to each SSS

JETstream

JETstream is the application that provides online data updates for Coding and Programming data. The feature allows the SSS to be up to date on the current/new vehicle data regarding coding and programming information prior to the release of an update DVD. The application can be configured to automatically search for online updates at a specific time (ex. after normal shop hours every night) and install any updates found at a specific time/point in the systems operation cycle.

In order for this feature to work the SSS must:

- Be located on the workshop network

- Be connected to BMW via a network connection

- Have the correct network specific data entered in the "Network" mask

- Have the host/domain name and IP address of the BMW server entered in the "Online Service" mask

- Have the "Automatic Online Update" feature active

Multiconsole/Multisession

Since the SSS is the primary Coding and Programming system, coding and programming tasks can be "transferred" to the SSS from any GT1 located on the workshop network. In order to monitor the tasks assigned to a specific SSS a menu of active jobs is displayed via Progman and can be accessed by any GT1 or SSS on the network.

Multiconsole	The multiconsole function makes it possible to control programming procedures both via the Software Service Station as well as via the BMW diagnosis systems GT1.
Multisession	The multisession function makes it possible to program several vehicles simultaneously.

This function allows the GT1 to be remote terminals for the SSS with respect to Coding and Programming and once a task is transferred to an available SSS, the GT1 can be used to diagnose another vehicle and/or transfer another coding/programming task to an SSS.

CIP

The Coding, Individualization and Programming application that has been used previously since the introduction of the E65 continues to operate the same as before. The only major change is that all of the Coding and Programming functions for the older vehicles (E31/32/34/36/38/39/46/52 & E53) that was only available on the DIS CD for use on DISplus and GT1 has been incorporated into CIP.
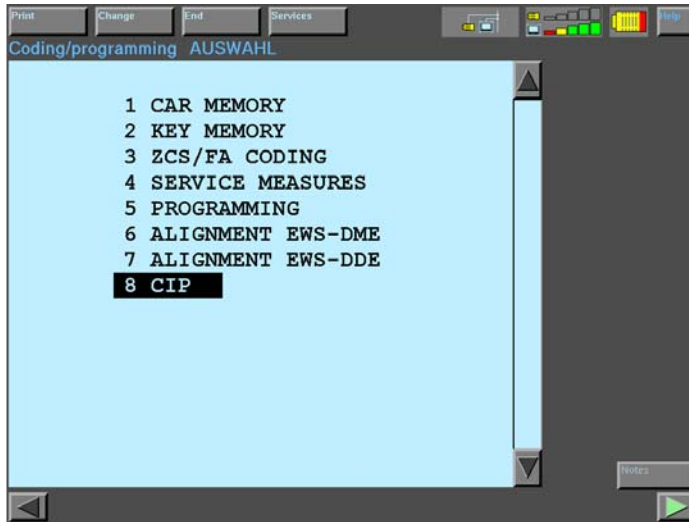
Prior to CIP15.0 SGC/Unix functions for Coding, Individualization & Programming were incorporated into DIS CD VXX.X.

As of CIP 15.0 SGC/Unix functions for Coding, Individualization & Programming are incorporated into CIP.

What Will Progman Do For Me?

Progman allows the GT1 to be released from the task of Programming and Coding vehicles. The GT1 will be capable of performing vehicle diagnosis while the SSS is used to Program and Code a vehicle(s).

Example: Given a workshop with 10 active workstalls (CORA) and equipped with 2-GT1's, 1-DISplus, 1-SSS, 3-Diagnostic Heads, 1 OPPS Head, 2-OPS Heads

Before Progman (CIP 15.0)

Device	# of MOST-bus equipped Vehicles able to be Programmed at one time	# Vehicles able to be Diagnosed while another is being Programmed
GT1	1	0
GT1	1	0
DISplus	0	1
SSS	1	0
TOTAL	**3**	**1**

With Progman (CIP15.0)

Device	# of MOST-bus equipped Vehicles able to be Programmed at one time	# Vehicles able to be Diagnosed while another is being Programmed
GT1	0	1
GT1	0	1
DISplus	0	1
SSS	5	0
TOTAL	**5***	**3**

*If 2 additional OPS heads are purchased for the workshop (refer to **SI B 07 02 04**)

By installing CIP 15.0 on all of the GT1's and SSS's, Progman can be accessed via any GT1 or SSS but is controlled/operated by the Software Service Station (SSS) only. Since the SSS controls/runs Progman, it will be the only device able to code and program vehicles, the GT1 will be viewed as a remote terminal for Progman.

With the introduction of Progman, parallel programming of up to five vehicles can be performed. The vehicles to be programmed do not need to be the same model series nor have the same data status or be connected at the same time.

Getting Started With Progman

Progman is launched from the GT1 whenever the Coding/Programming function is selected. On the SSS Progman is always active as this is the only program installed on the system.
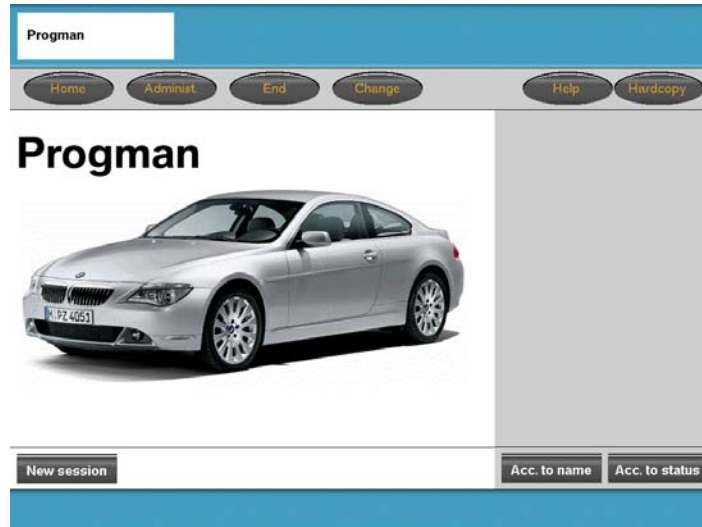
From the main menu screen in Progman the administration features for system configuration can be accessed or a new session can be started. By selecting "Help" a more detailed document explaining Progman can be accessed.

Administration
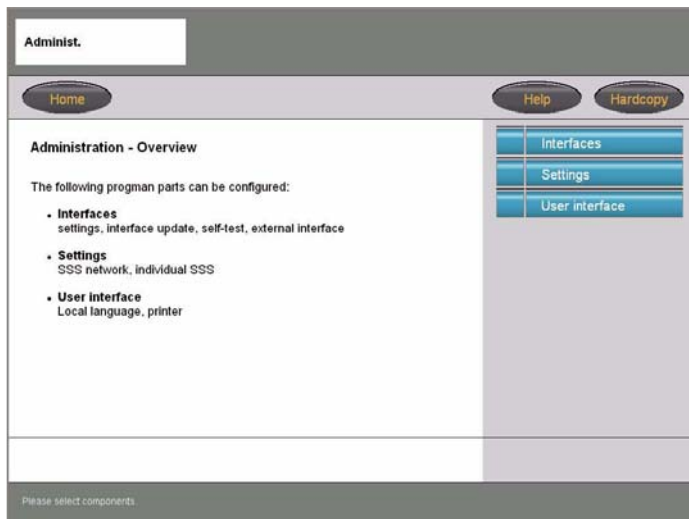
In order to insure initial system setup selecting 'Administration" will bring up a new screen which explains the menu selections available on the right side.

At this point Interfaces, Settings or User Interface can be selected.

Interfaces

By selecting "Interfaces" an overview of all available and/or connected interfaces is obtained along with information pertaining to the status of the interface, device name, software level and IP address.

Explanation of Status Indicators

Symbol	Description
Green background	Green background - interface is free and can be selected
Grey background	Grey background - interface not detected - It is currently being shut down or started up - It is unconfigured referred to the sub-network in which it is located
Red background	Red background - the interface is occupied and is not available for a session It is possible to query the configuration and the current session.
OPS	Black lettering - interface can be selected
OPS	Grey lettering - interface cannot be selected as it is not available or cannot be reached
?	Black question mark- interface is unconfigured referred to the sub-network in which it is located
?	Grey question mark - connection to interface is not possible, the device cannot be reached
gear wheels	Black gear wheels - the interface is currently being used exclusively. Only the configuration data can be queried.
Diagnostic Head image	Diagnostic Head
OPS image	OPS
OPPS image	OPPS

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Examples of Possible Combinations

Symbol	Description
	OPS with grey background and grey question mark: The OPS can not be detected as it is currently being started up or shut down or is not correctly configured/connected for the current network When devices are not connected, they are indicated as a grey question mark on a grey background without the interface symbol.
	OPPS with grey background and black question mark: A black question mark means that the OPPS is not configured for the current network.
	Diagnostic head with red background and black gearwheels: The diagnostic head is currently being used and is not available for a new session at this time. Only the configuration of the diagnostic head can be queried.

Interface Name

An interface name can be freely assigned to each interface so as to simplify definition of the interface in the workshop. The name used should be helpful in locating/identifying the particular interface if necessary.

Example: *Assign a name that uses the color band placed on the interface along with a letter of the alphabet (i.e. Blue A), place a label on the interface to identify the specific name that has been assigned and then modify a "service" hat by assigning the name of the interface to it as well, so that it can be placed on the vehicle to identify the interface being used on the vehicle.*

Version

The firmware version indicates the software level currently installed on the selected interface (OPPS/OPS/ diagnostic head). It is recommended that the version on the interface be the same as that of the SSS it is being used with.

IP Address

The IP address (internet protocol address) is a unique and specifically assigned address for each device in the workshop network. This address consists of a number block which is normally structured as follows.

Example: *192.168.100.10*

The IP addresses must be structured so that each device in the network is distinguished from all the others and must be exclusive to that device and not shared among other devices connected to the network.

External Interface

This column indicates whether the current interface is an external interface. External interfaces are located in external subnetworks and can be used in connection with this Software Service Station.

Overview
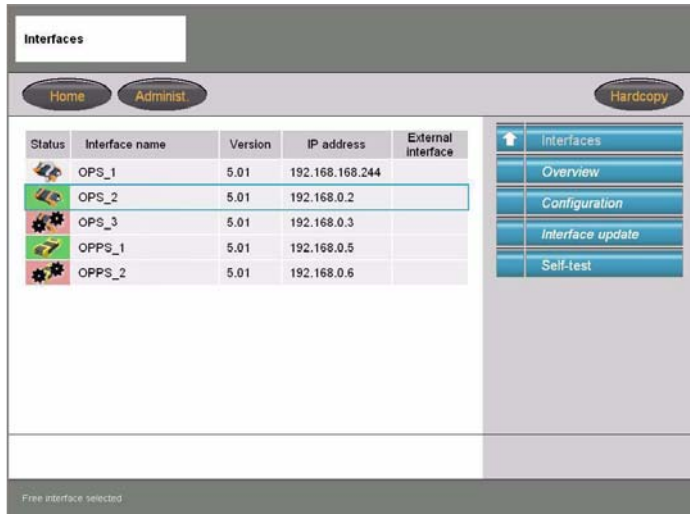
If an interface is selected and items on the right of the screen in the menu listing are selectable (not grey) then additional information can be accessed for that device.

In this example "Overview","Interface update", "Configuration" and "Self-test" are available.

If a device is not correctly configured for the network certain selections may not be available for that device.

Note: The Interface list does not automatically update as devices are utilized or freed up. The only way to update the list is to select "Overview".

Configuration
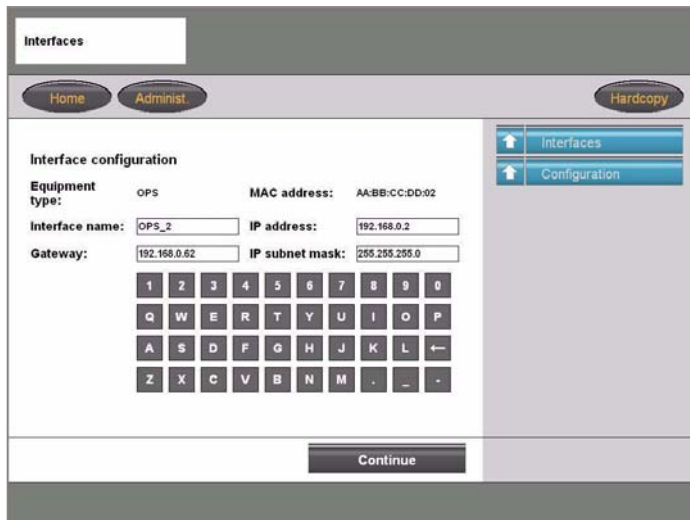
Configuration provides information for the device selected pertaining to:

- Interface Name
- IP Address
- Gateway
- IP Subnet Mask

Interface Name
The specific name assigned to the device (Ex. Blue A). The name used should be helpful in locating/identifying the particular interface if necessary.

IP Address
A specific four segment number assigned exclusively to the device. The number represents the address of the device on the network and is necessary when communicating with other devices located on the network.

Example: *192.168.100.10*

Gateway

This information identifies the four segment address of the component located on the network responsible for communicating from the current network to another network. If the there is no address in this location then a connection to any devices outside of the current network can not be established.

IP Subnet Mask

This information is used to define which segment of the four segment IP address specifically identifies the device and which identify the specific network.

Example: *255.255.255.0*

> *Indicates that the first three segments (255.255.255) identify the specific network that the device is located on. The last segment (0) indicates that this is the segment that will identify the specific device.*

Note: The network and device address information must be entered exactly as defined by the network administrator for your facility, otherwise the devices can not be accessed.

After entering the necessary information and continue is selected, Progman will run a check on the values/information entered and will indicate if the information is acceptable.
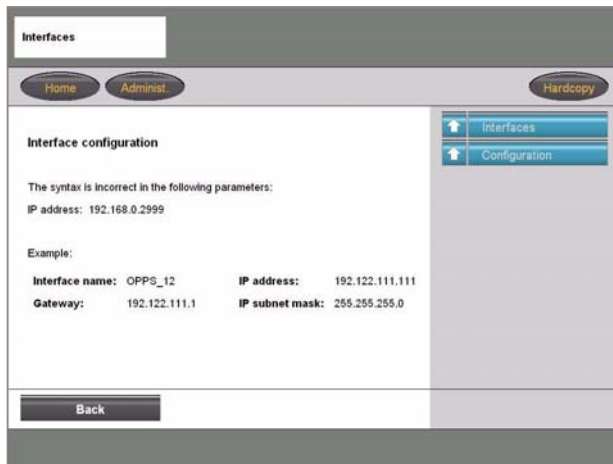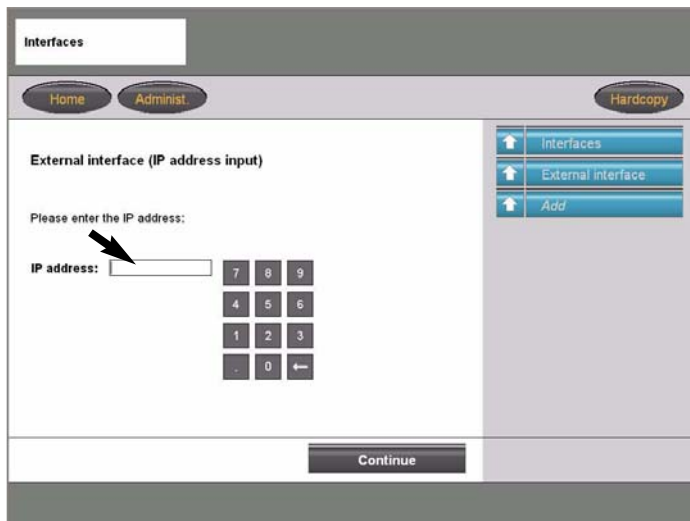
Interface Update

Interface update can only be selected if the selected interface is not being used by another device (interface symbol has a green background).
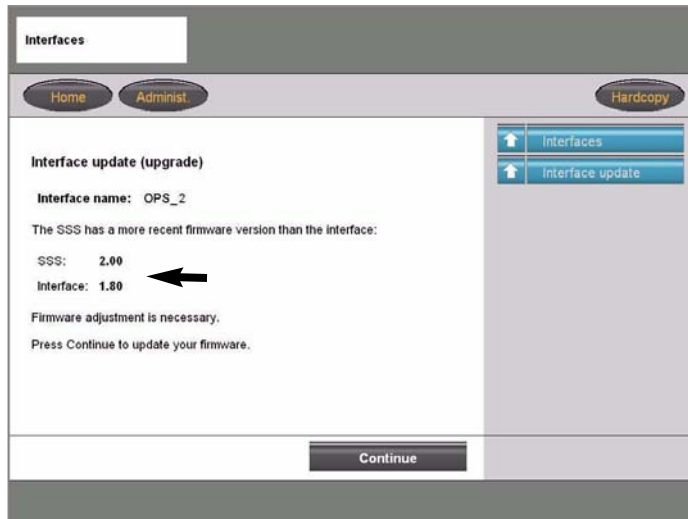
This function allows the firmware of the interface to be checked against the version of the SSS.

It is recommended that the version of the SSS and the Interface be at the same level to reduce susceptibility to errors and system conflicts.

The SSS will check which firmware version is installed in the interface and then searches for the newest available version on the SSS. Depending on the result of the search, Progman will make a recommendation as to what action should be taken.

- If both versions are equal no action is required.

- If the version on the SSS is newer then Progman will suggest updating the version on the interface.

- If the version on the SSS is older, Progman is able to change the version on the interface to the older one.
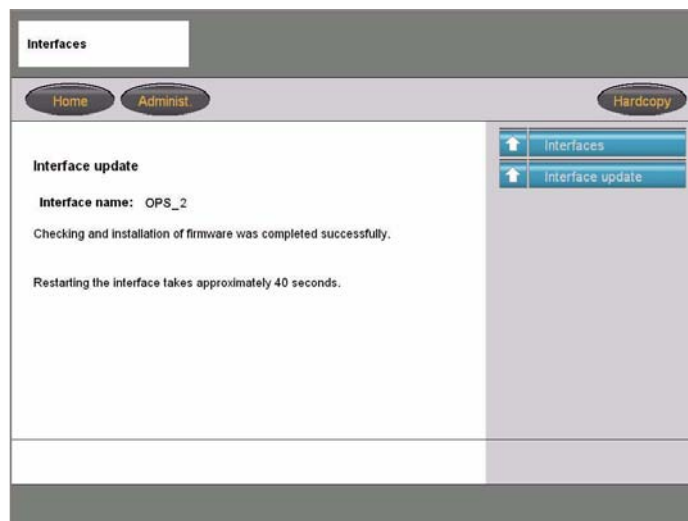
Once the update is successfully completed a corresponding message is displayed.

Updating Interface after Initial Install

After the initial installation of Progman with CIP 15.0, the firmware installed on the interfaces that will be used with Progman must first be updated. If the firmware level of the interface is not at a predefined level then it will not be recognized/identified within the Progman application, thereby not allowing a connection to the interface. This update only needs to be performed when an interface is used for the first time with Progman.
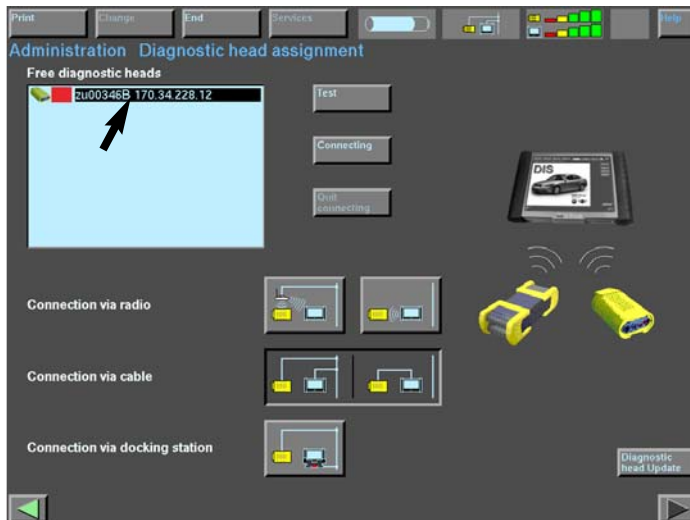
Using the GT1 update the firmware in the interface.

Select the interface
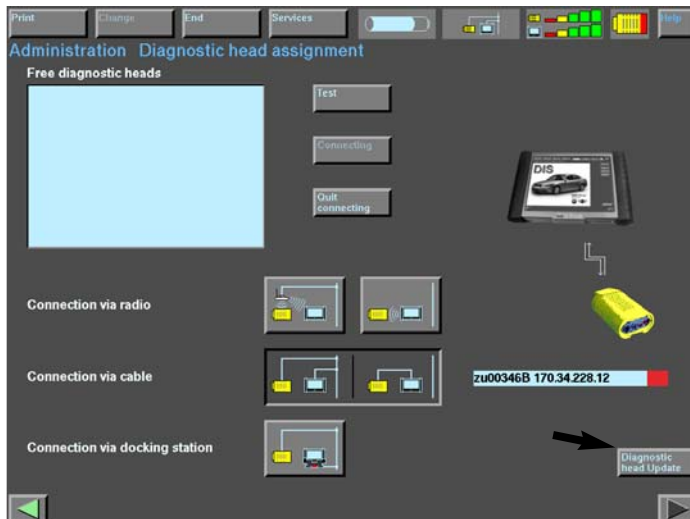
With a connection to the interface established a message should be displayed indicating that the firmware in the head needs to be updated, perform the update by selecting the "Diagnostic head Update" button.

After the update is complete select "Quit connecting".

Access Progman and verify that the interface is recognized

From Progman the firmware level of the interface should also be checked and updated if necessary. Progman does not automatically inform the user if the firmware of the interface needs to be updated.

Updates to the interface are checked and performed by selecting the specific interface from the list, located under "Administration" - "Interfaces", then selecting "Interface Update" (refer to previous page for additional information).

Self-Test

Self-test can only be selected if the selected interface is not being used by another device (interface symbol has a green background).

Depending on the interface selected a test loop must be attached to the interface.

- For opps use test loop 663124 and 663131
- For OPS use test loop 663124
- For Diagnostic Head , no test loop is needed
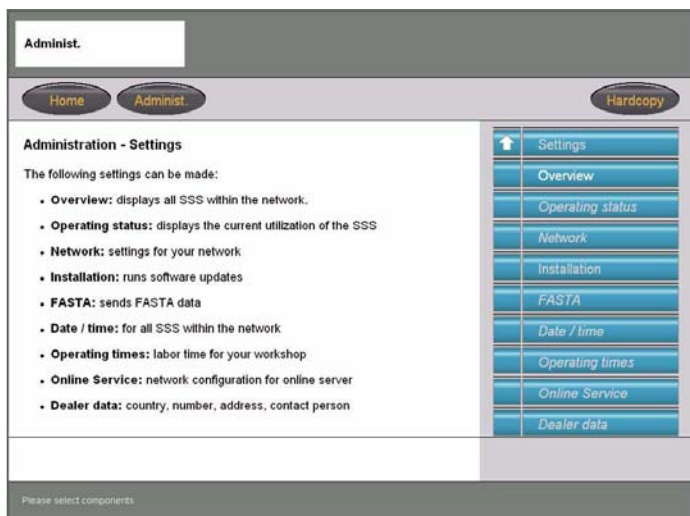
External Interface

An external interface is an interface that is not automatically detected by Progman or is not contained in the subnet of the workshop network, such an interface can be added manually to the list of available interfaces or removed using this function. In order to add an interface the I/P address of the interface must be entered.

Example: *The dealer has two separate service facilities each with its own network, an external interface can be connected to a vehicle located within one network and accessed by a GT1 or SSS located in the other network in order to Code/Program the vehicle.*

Settings

From the Administration screen the "Settings" tap allows access to information specific to a selected/specific SSS.

Overview

The overview tap provides a listing of all SSS's that are located on the network.

The Overview screen provides information pertaining to:

- Operating status of a particular SSS

  Ready (Green) = Usable
  Full use of SSS is possible

  Limited (Yellow) = Usable
  The number of possible sessions is limited (Ex. a download of a new update is in progress)

  Not Ready (Red) = Maintenance
  No new sessions are possible (Ex. an update is currently being installed)

- Number of active sessions on each SSS

- The CIP version installed on each SSS
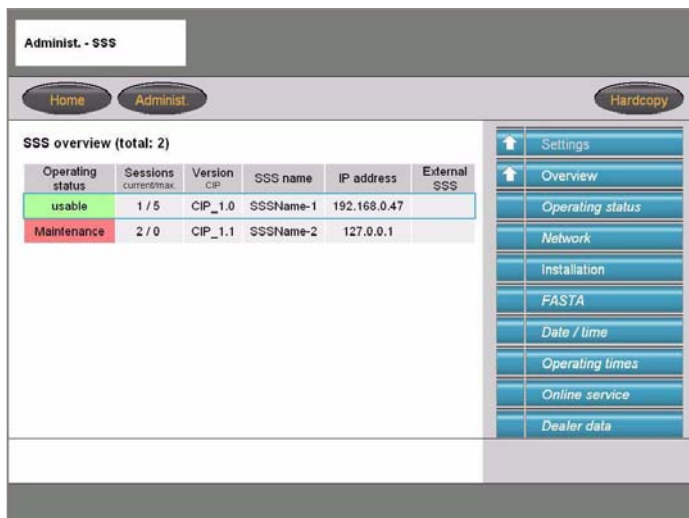
Upon selecting a particular SSS additional menu selections are possible.

The selected SSS is highlighted in a blue frame and all items are possible for the selected SSS are active in the menu.

Operating Status

This menu item provides a more detailed status information for specific SSS then the Overview table.
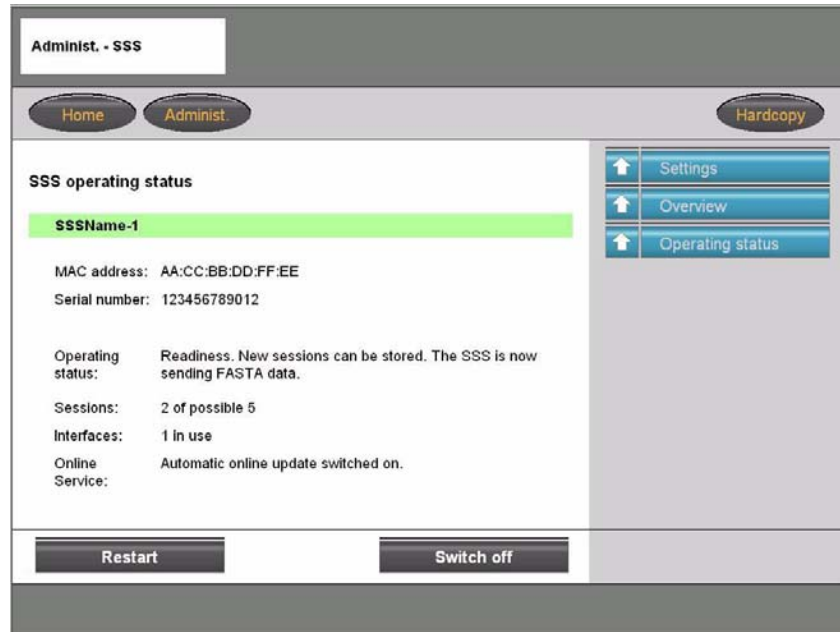
The name of the SSS is displayed with a colored background indicating the status of the selected SSS.

Green = Ready   **Yellow** = Limited   **Red** = Maintenance

Additional status information is also displayed:

MAC address – Media Access Control address is an unchangeable and unique address for identification of a network device.

Serial Number – Serial number of specific SSS

Operating Status – Provides detailed information about the current operation of the SSS

Sessions – Indicates the number of currently active/started CIP sessions.

Interfaces – Indicates how many interfaces are connected to the specific SSS

Online Service – Indicates whether the online update is activated on the SSS

From this location it is also possible to change the operating status of the SSS, as long as the selected SSS is currently in the "Ready" status, plus **this is also the recommended location from which the SSS should be restarted or shutdown using the buttons at the bottom of the screen.**

Network

The Network function allows network config-uration information specific to the SSS to be entered, these settings should have been set during the initial installation of Progman/CIP15.0.

Note: Maintain a copy of the system configuration information, in the event information gets disturbed, printout a copy and keep in a binder along with information for DISplus, GT1 and the interfaces.

Information that can be entered is similar to the information needed to configure an inter-face. The following information must be entered to correctly configure the SSS to the network:

- Assign a name specific to the SSS

- Gateway Address

- IP Address specific to SSS

- Information pertaining to the IP subnet mask

Any changes that are made to the configuration are saved by selecting continue and will go into effect once the SSS is restarted.

Note:

Restart immediately means that Progman checks the current status of any sessions that are still active and once the sessions are complete the system will restart.

Restart later indicates that Progman will wait until the end of the day (specified under "Operating Times") to check and restart the system.

Installation

The Installation tap is selected when updates need to be installed either by a way of a new CIP DVD or checking for new online updates (Automatically or Manually). The updates that can be installed pertain to the Progman application as well as updated vehicle data files for utilization by CIP.

The table provides an overview of the software program and version currently installed.

The selection/activation of Automatic online updates via the BMW server is selected from this screen.

"DVD update" can be selected whenever a new CIP DVD needs to be installed.

"Online update" allows a manual check for online updates to be initiated.

Note: It is recommended that the Automatic Online Update feature be activated to insure that needed Program and Coding updates are received in a timely manner. When new updates are made available they are downloaded and and installed after the normal operating times of the workshop as specified under "Operating Times".

"Display status" provides information pertaining to the installation of the latest update.

Information pertaining to an erroneous installation of an update is displayed in the messages section.

Note: If frequent error messages are displayed contact your service provider for assistance and have available a copy of the error messages that have been received.

FASTA

The FASTA function assures that vehicle operation and service data from the diagnostic and programming devices are sent to BMW. With Progman if data is available it is transmitted automatically every five minutes

This function shows if any data is available for transfer and when it will be sent.

By selecting "Send data" (manual send) make sure that no sessions are currently running on the SSS as this will lengthen the data transmission process.

It is preferred that the automatic transfer process be utilized.

Note: In order for FAST data transmission to be possible the correct BMW server address must be entered in the "Online Service" menu.

Date and Time

In this function the current date and time must be entered. An automatic correction for daylight savings time to standard is made automatically.

Operating Times

The normal operating time of the workshop/service facility is entered in this function. The time is used to establish a maintenance period for the SSS. The end of normal operating time signals Progman to start executing/installing any online updates that may be available.

Dealer Data

Information pertaining to country of operation, dealer number, dealer name, dealer address, contact person Telephone number and Email address are entered in this selection.

User Interface

Under this menu language settings specific to the individual SSS and printer configuration information can be set.

Example: If the language of the SSS is set to German then all information displayed on the SSS will be in German, however it does not mean that the GT1 will also display the text in German when accessing Progman and "connecting" to that SSS.

Workshop Exercise - Configuration Check

1. Check/access network configuration information for:

    - SSS
    - DISplus
    - GT1
    - Interfaces (Opps, OPS & Diagnostic Head)

    _____

    _____

    _____

    _____

    _____

2. Check firmware level of interface's via SSS.

    _____

    _____

    _____

    _____

    _____

Starting a Programming or Coding Session with Progman

In order to start a session in Progman the Diagnostic, OPPS or OPS head that will be selected can not be connected to the DISplus or GT1.

Disconnecting From Interface to be Used by Progman
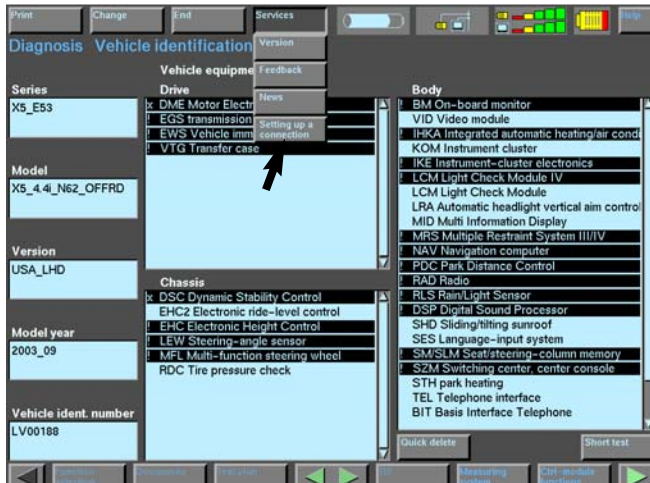
If the vehicle to be programmed was previously being diagnosed using a diagnostic head with the GT1, then the connection with the head must be broken before that head will be recognized by Progman.

Select "Service"

Select "Setting up a connection"

Select "Quit connecting"
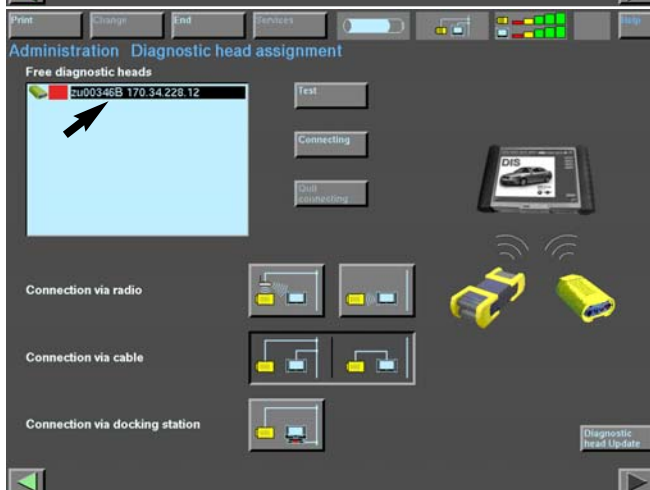
The selected head is free/disconnected
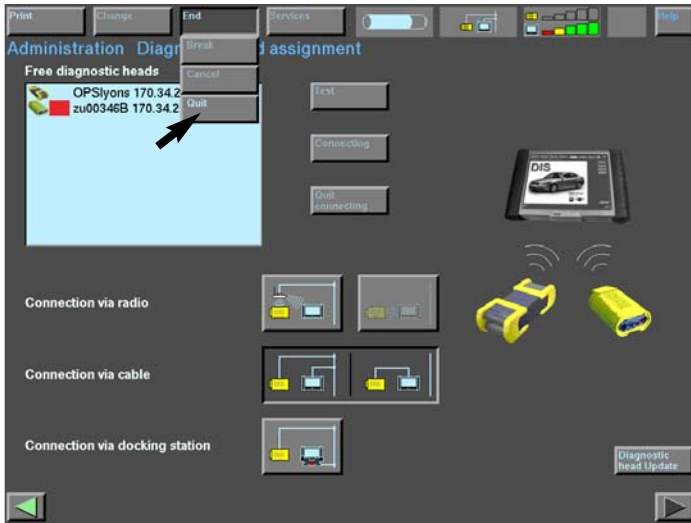
Select "End"
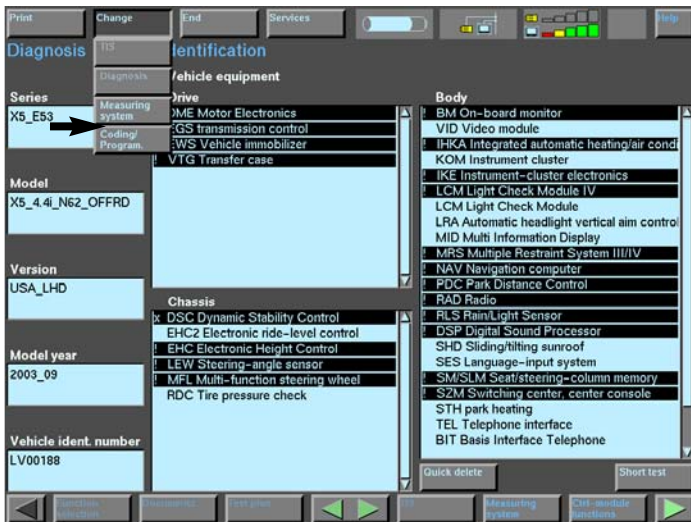
Select "Change"

Select "Coding/Program"
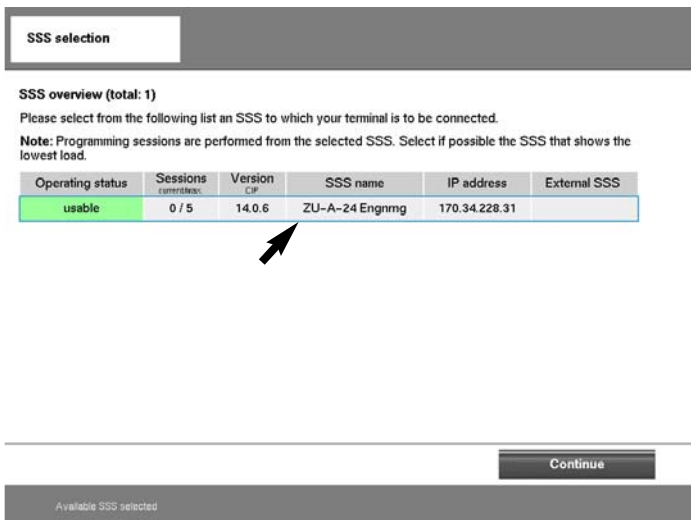
Select available SSS

Select "Continue"

Starting a Session with Progman
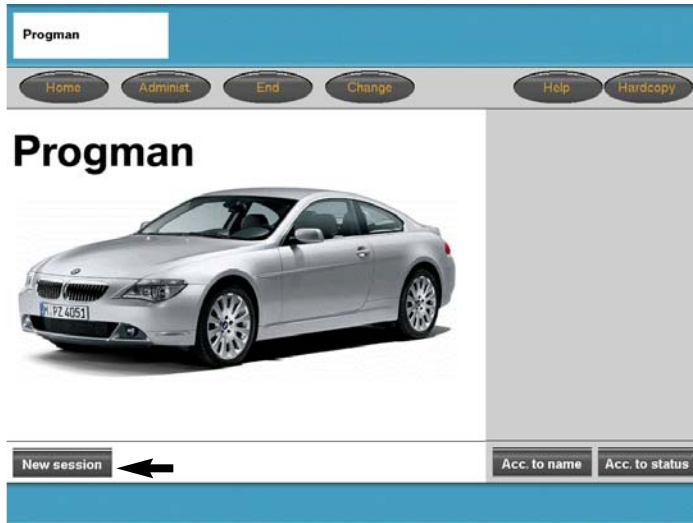
Select "New Session"
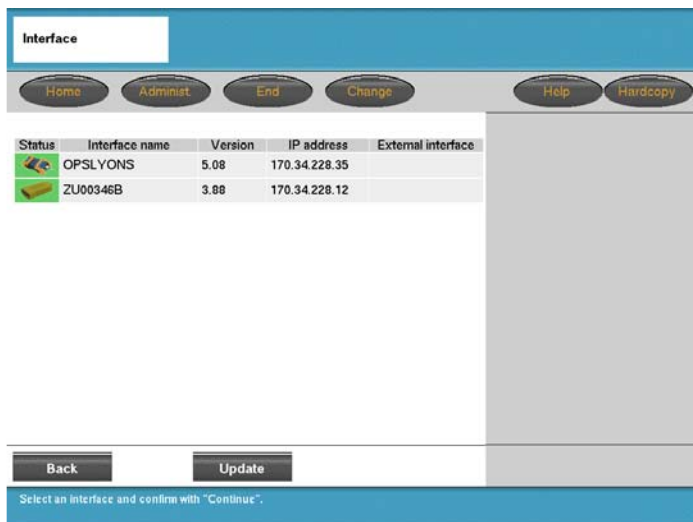
Select the desired interface

Select "Continue"
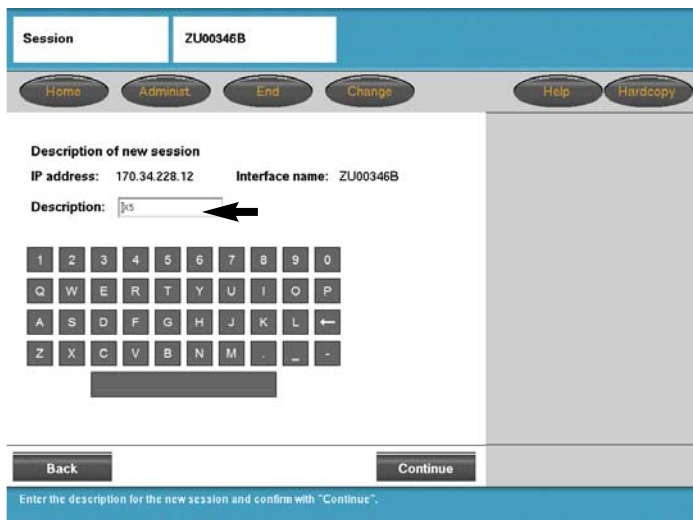
Under "Description" enter information that will identify the vehicle to which the interface is connected (Ex. VIN or Model type, Service hat #, Vehicle color, Bay location, etc.)

Select "Continue"

Access CIP Functions For E31E32/E34/E36/E38/E39/E46/E52/E53
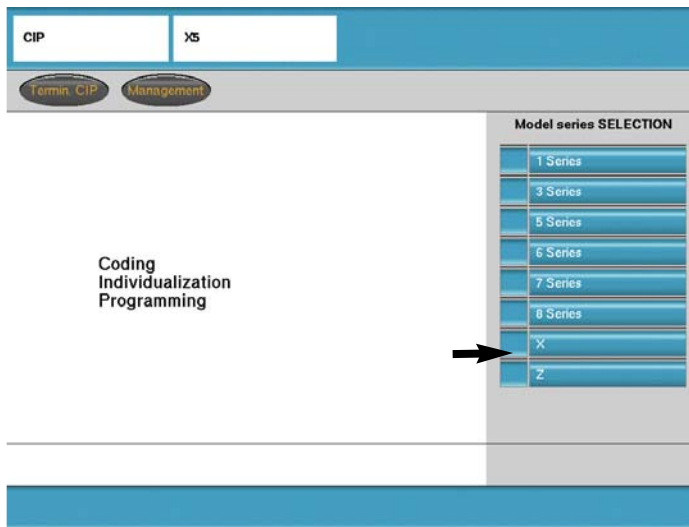
Select desired model series

For this example an E53 - X5 is being used, therefore select "X"
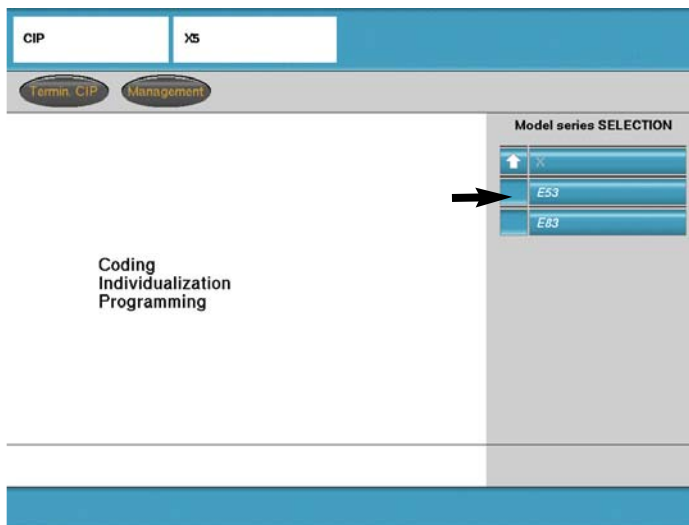
Select "E53"

The screen now displays the SGC/Unix screen previously accessed via the DISplus/GT1 when coding and programming was selected.

At this point select the desired function and proceed as stated in the respective Service Information Bulletin for the procedure being performed.

Access CIP Functions For E60/E62/E63/E64/E65/E83/E85...
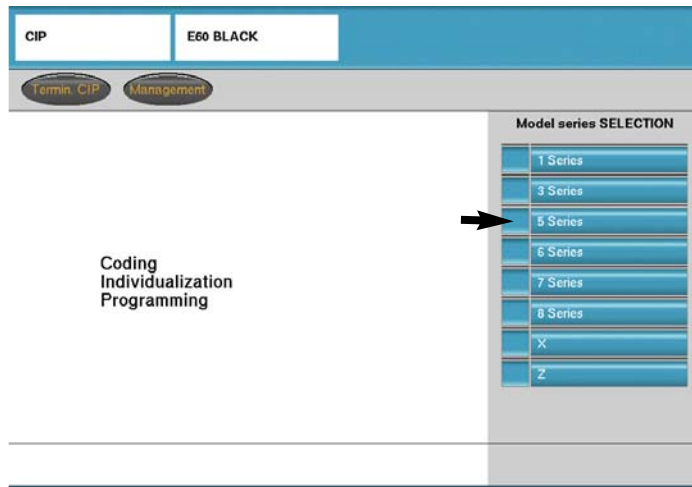
Select desired model series

For this examples an E60 is being used, therefore "5 Series" is selected
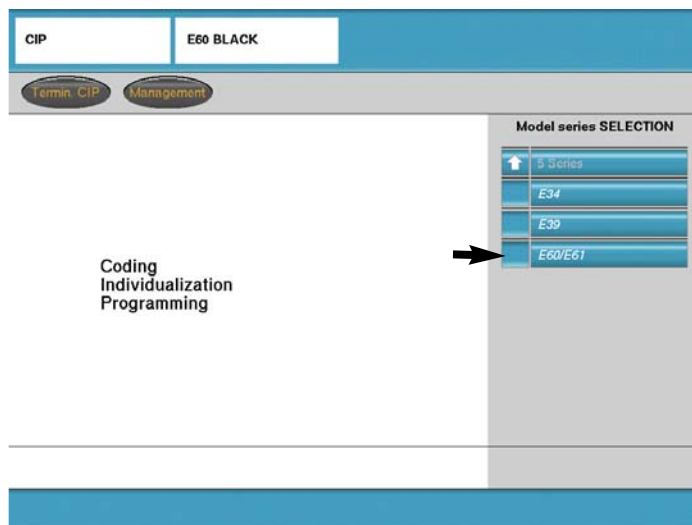
Select E60
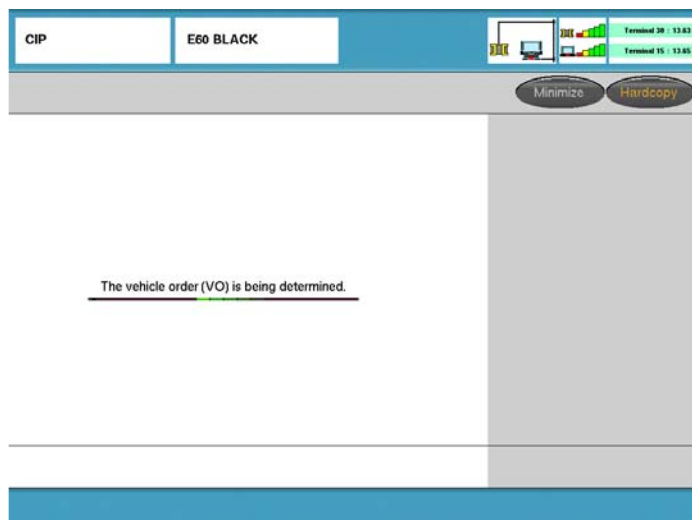
CIP is determining the vehicle order for the vehicle being accessed.
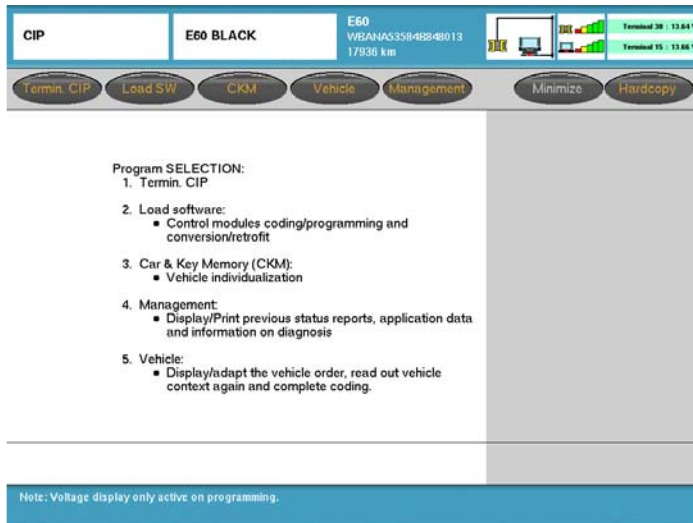
From this screen select the desired function and proceed as stated in the respective Service Information Bulletin regarding CIP procedures (Refer to **SI B 09 05 01**).
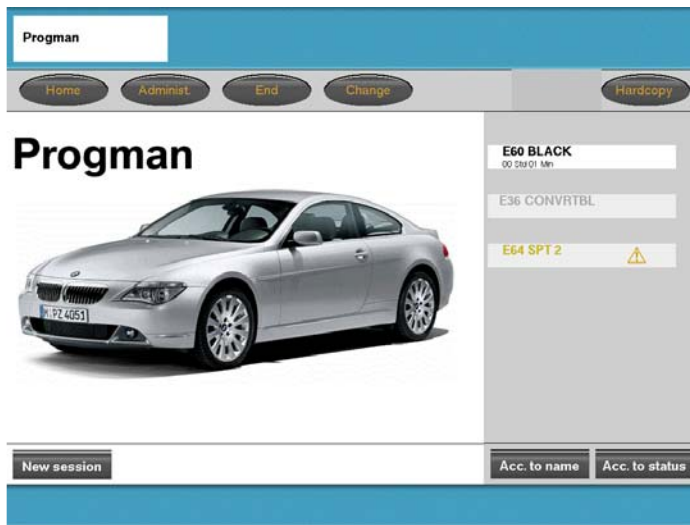
Return to Progman "Home" Screen
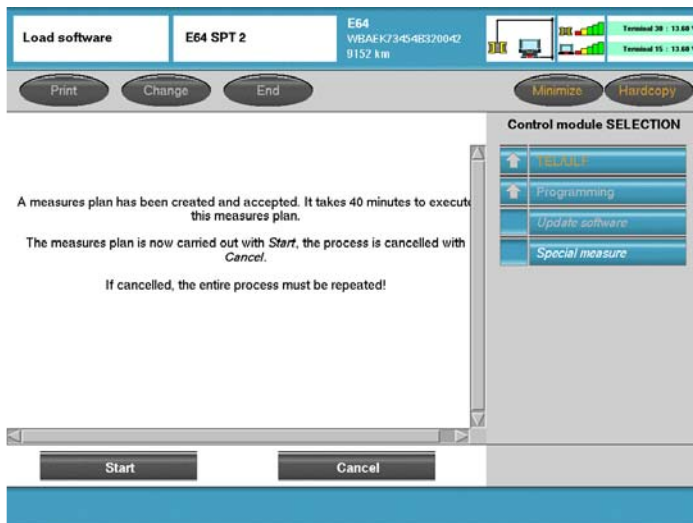
Select "Minimize"
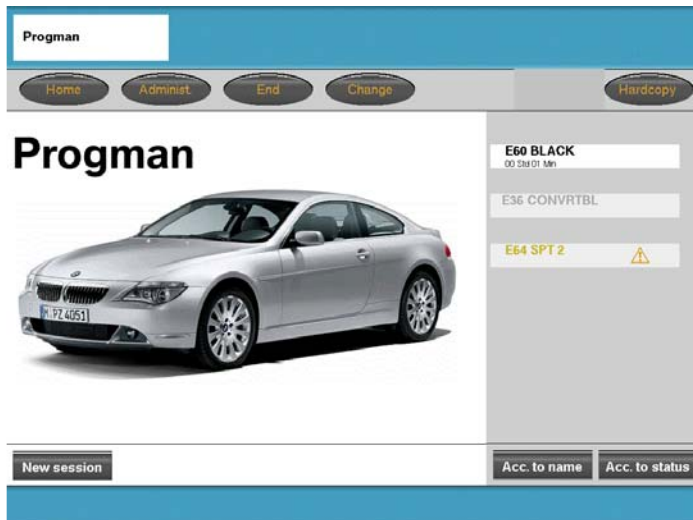
The Progman "Home" screen is displayed, from here a new session can be started or a current session reviewed.

If using a GT1 a change to diagnostics can also be made.

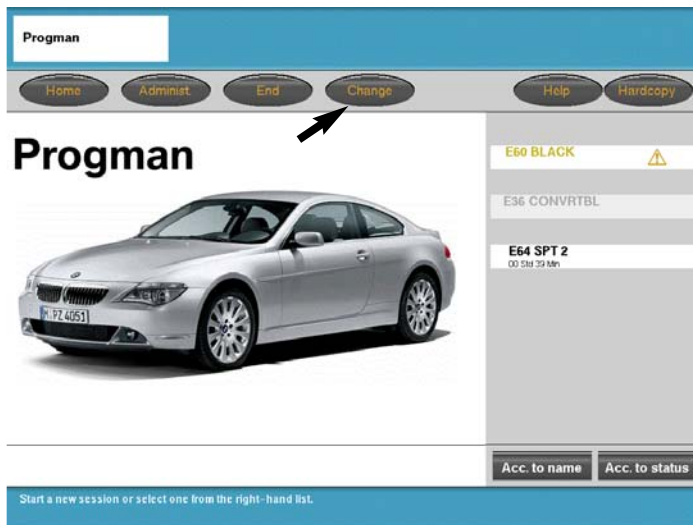## Progman "Home" Screen Session Status

The Progman "Home" screen displays all sessions that are running on a particular SSS and allows any of the sessions to be reviewed.
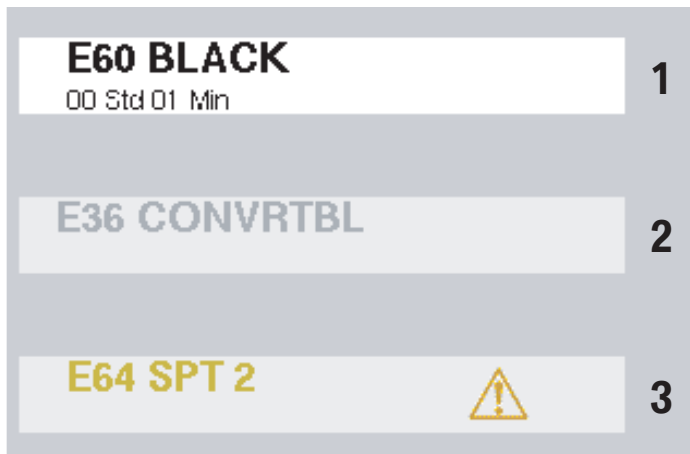

Explanation of session status indicators:

1 - Black text with white background indicates that session is running and does not require any input, the status of the session can be reviewed.

2 - Grey text indicates a session is active/in progress and is currently being accessed or reviewed by another user. This session can not be accessed by an additional user.

3 - Orange text indicates that input is required before program can continue, this session should be accessed and reviewed to provide required input.

Going from Progman to Diagnosis on GT1

If using a GT1 it is possible to switch from Progman to a diagnostic function.

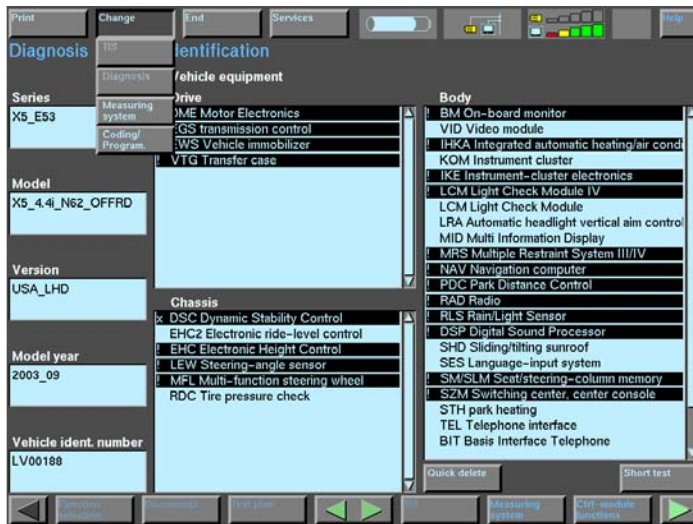From the Progman home screen select "Change"
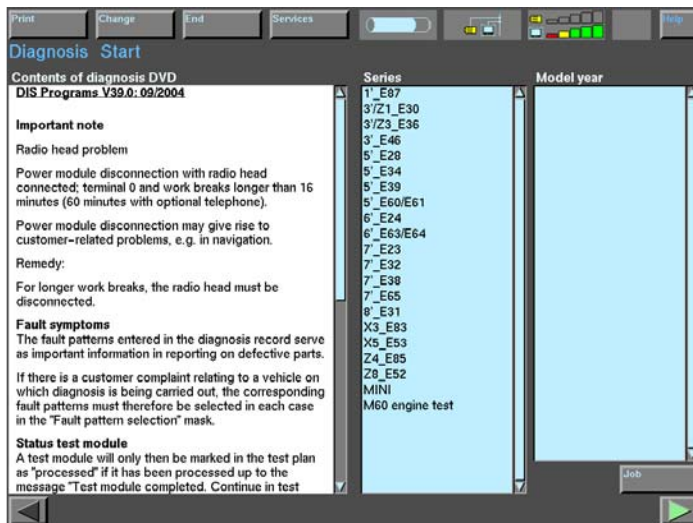
The GT1 will switch to diagnostics and a new diagnostic session can be started by connecting to an available interface, if nothing was previously active.

Or

If a diagnostic session was previously active then the system will return to that point, prior to having switched over to Progman.
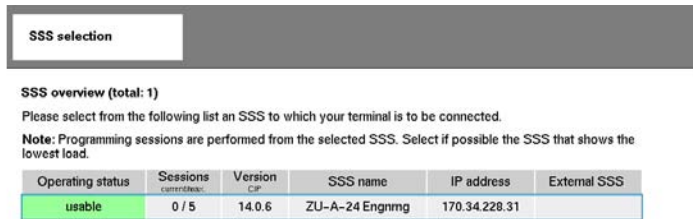
Going from Diagnosis to Progman on GT1

If using a GT1 it is possible to switch from a diagnostic function to Progman to check the status of an active session.
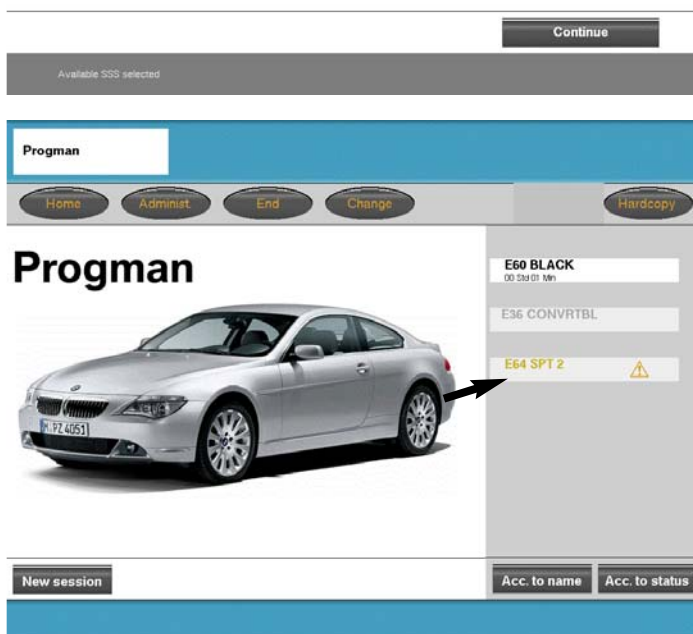
From the the diagnostic screen:

Select "Change"

Select "Coding/Program"

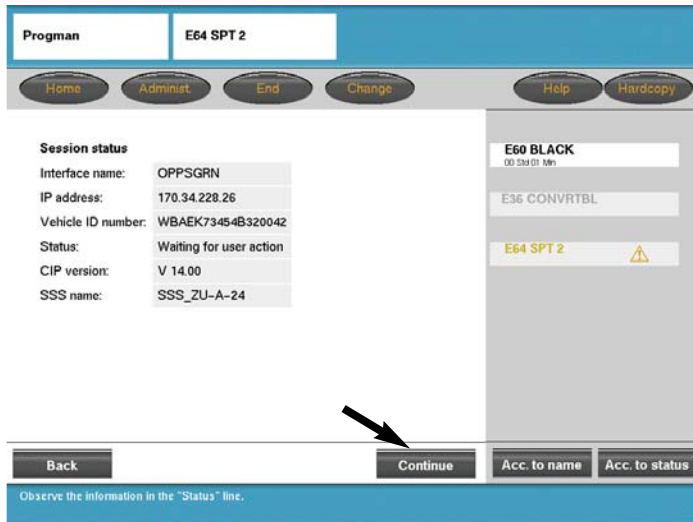Select the SSS on which the session is to be checked

The GT1 will switch to the Progman session.
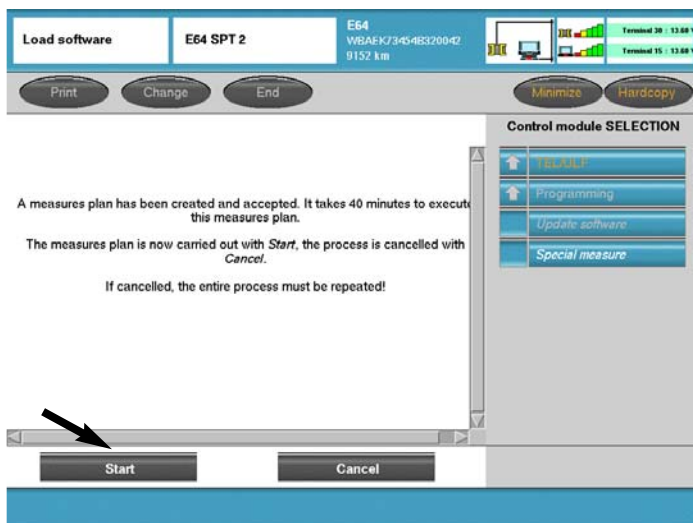
Select the session to be checked.

Example:

The E64 SPT 2 session is highlighted in orange, which indicates that a user input is required.

Select "E64 SPT 2"

The status information for the selected session states that it is "Waiting for user action"

Select "Continue" to view/access the session

Select "Start" to initiate/carryout the measures plan

Or

Select "Cancel" to end the process and return to the previous module selection screen of CIP.
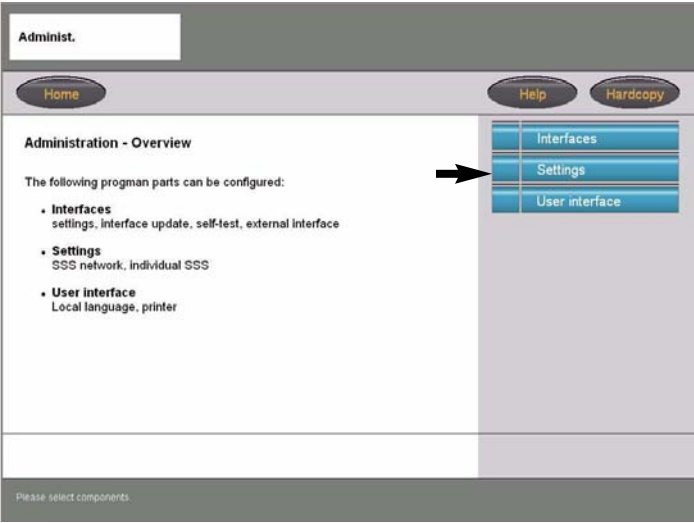
Or

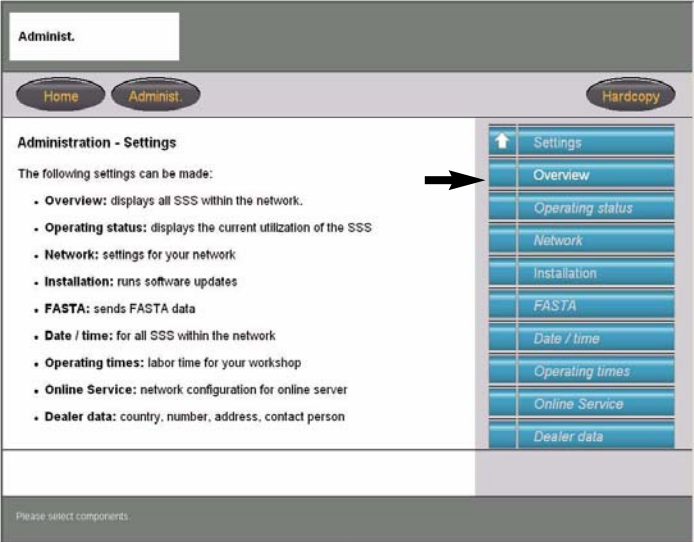Select "Minimize" to return to the home screen of Progman.
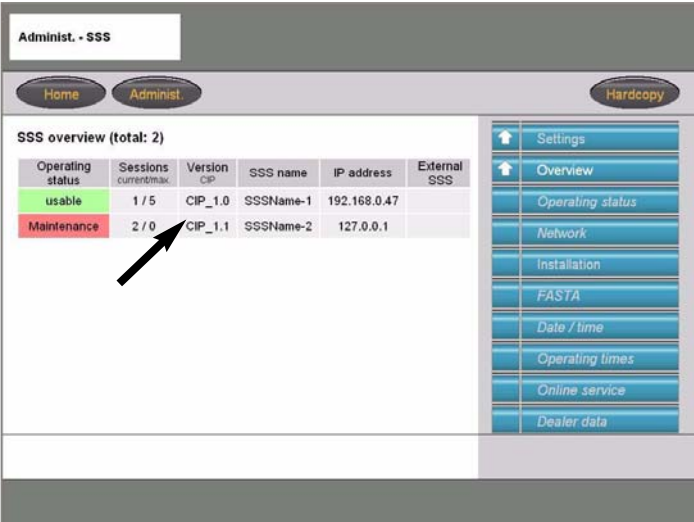
Shutting Down the SSS

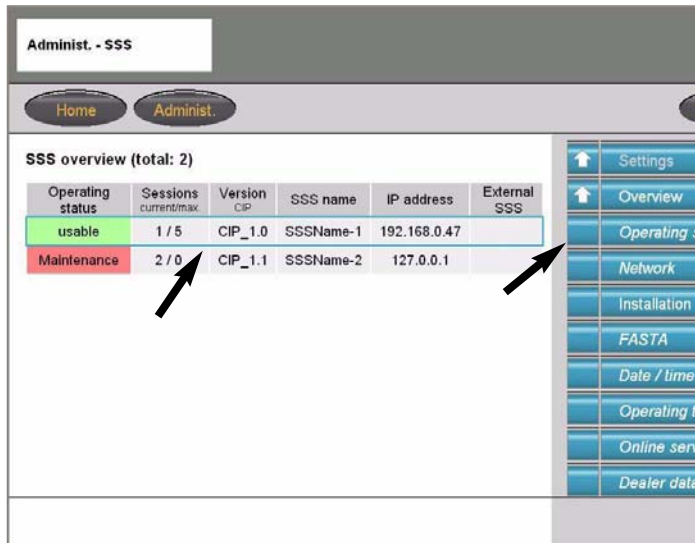After selecting "Administ." on the Progman Home screen select "Settings".
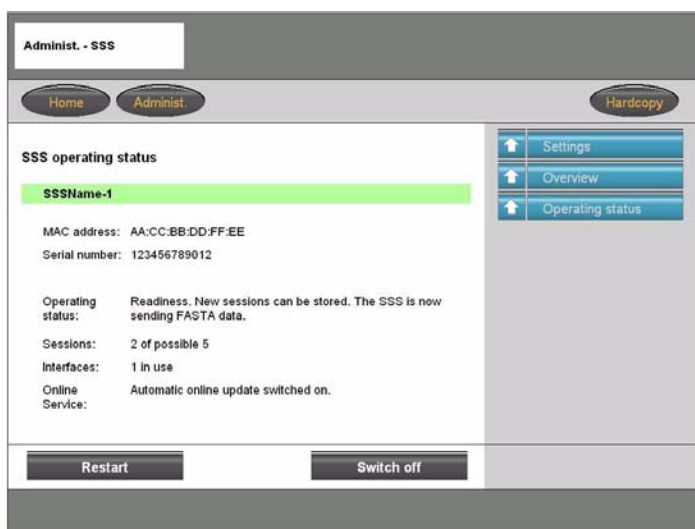

Select "Overview"

Select the specific SSS to be shutdown

After selecting the specific SSS, select "Operating Status".

This is the only location from which the SSS should be restarted or shutdown using the buttons at the bottom of the screen.

Selecting "Restart" will switch the SSS off and then back on.

Selecting "Switch off" will turn the SSS off.

Note: <u>The on/off button located directly on the computer should not be used to turn OFF the SSS.</u>

Workshop Exercise - Access CIP & ZCS

1. *Access CIP for an E60.*

2. *Access ZCS functions to obtain the central coding key on an E53 or Vehicle order on an E46.*

Review Questions

1. *What is Progman?*

2. *Why do we need Progman?*

3. *What advantage(s) does Progman have over the older method (CIP xx.x and DIS xx.x)?*

4. *What is the purpose of an IP address, Gateway address and subnet mask?*

5. *How can the the firmware level in an interface be checked and updated?*

6. *Why is it important that the firmware in an SSS and the interface(s) being used are the same?*

7. *What steps must be followed in order to Code or Program an E38?*